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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,428	01/03/2001	Kung-Liang Kevin Sung	IPC-109A, Case 25	1174
321	7590	02/27/2007		
SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			EXAMINER KUHN, ALLAN R	
			ART UNIT	PAPER NUMBER
			1732	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/27/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/27/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@senniger.com

## Office Action Summary

Application No.

09/753,428

Applicant(s)

SUNG ET AL.

Examiner

Allan Kuhns

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26, 29-34 and 44-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26, 29-34 and 44-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 26, 29-34 and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waki et al (4,800,214) as set forth in the previous Office action in view of Patterson et al. (6,784,230). While it is recognized that Applicants are claiming a synthetic sheet product, it is argued, in response to the previous Office action, that Waki et al. disclose little about the process used to produce the sheet and that it is the cooling of the hot extruded sheet by Applicants that results in the production of a sheet having a hardness within the claimed range. But Patterson et al., at column 3, lines 18-22, note that their foamed extrudates are hardened with a cooling fluid. It is therefore submitted that one of ordinary skill in the art, in forming a sheet described by Waki et al. and practicing the hardening step disclosed by Patterson et al. would have expected to produce a sheet having a hardness within the instantly claimed range.

Since Waki et al. disclose the use of wood in powder form, it is submitted that the powder would meet the sieve size requirement of claim 45. Patterson et al. disclose the effect on bulk density of adding wood powder or flour to a blend at column 22, lines 43-60, and given this disclosure, it is submitted that the wood powder or flour would possess a density within the range of claim 46. Based on the disclosure of Waki et al., there is no reason to conclude that the wood particles or powder should possess a moisture content outside of the range of claim 47. In addition, Patterson et al. teach at

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column 7, lines 65-67 that wood powder or flour may contain moisture of up to only 15%.

3. Applicants' arguments filed November 29, 2006 have been fully considered but they are not persuasive. In addition to the arguments concerning hardness addressed above, Applicants argue that the claims, including 29, 31, 32 and 44, have a recited thickness which is not taught or suggested by Waki et al. The examiner disagrees because Waki et al., at column 12, lines 49-58, provide guidance to one of ordinary skill in the art in determining sheet thickness by describing how a flat die of 2X 39 mm is used to produce a sheet thickness of 3.0 mm after film removal. It is the examiner's position that it is well within the skill level of one of ordinary skill in the art to adjust die sizing in order to produce sheets meeting the instantly claimed thickness requirements.

Applicants also refer to previously discussed processing steps with regard to shrinkage and claim 30, but Patterson et al. teach or suggest such a cooling step. Given the composition taught or suggested by the prior art relied upon, it is still the examiner's position that the shrinkage limitation of claim 30 would be realized if the stated treatment of this claim is practiced. Note that claims to a process itself are not being evaluated.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allan Kuhns whose telephone number is (571) 272-1202. The examiner can normally be reached on Monday to Thursday from 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson, can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Allan R. Kuhns*  
ALLAN R. KUHN'S  
PRIMARY EXAMINER A U 1732  
2-16-07